

**Solicitation Number: 07-0008-03**  
**Support Service for the Office of Naval Research for Code 331, Sea Warfare and Weapons Department, Ship Systems and Engineering Division**

The statement of work, order information, proposal submission requirements, and evaluation information are set forth below. Proposals from holders of ONR Multiple Award Contracts (MATOC) for support services under CLIN 0008 Technical, Programmatic and Engineering Support Services are due by 2:00 PM (local), 06 November 2006.

## **1.0 Background**

The Office of Naval Research (ONR) Sea Warfare and Weapons Department, Ship Systems and Engineering Division (Code 331), requires technical, programmatic, and management support services. The services will support a variety of naval technology programs including Advanced Naval Power Systems, Advanced Platform Concepts, Platform Survivability, Sea Basing Systems and National Naval Responsibility and overall technical support for Code 331.

This is a continuing requirement. The incumbent is Alion Sciences (formerly Anteon Corporation), (Contract N0014-99-D-0514 Delivery Orders 0008, 0009, 0011, 0017, 0019).

## **2.0 Statement of Work**

### **2.1 Objective**

The Ship Systems and Engineering Division is focused on providing technologically superior warfighting capabilities at reduced costs for surface and subsurface platforms through investments in basic and applied research, and advanced technology development of programs in the following areas: Advanced Naval Power Systems, Advanced Platform Concepts, Platform Survivability, and Sea Basing Systems. Research topic areas of interest that contribute to these focus areas include: electrical power generation systems and equipment; energy conversion, distribution, and storage; electro-mechanics; thermoelectrics, phototonics, thermal energy management; stability and control of electrical networks; ship design and analysis; systems engineering; ship systems integration; hydromechanics; maneuvering and sea keeping, hydroacoustics, structural mechanics; solid mechanics, thermo-mechanics; structural acoustics; structural dynamics; computational mechanics; advanced structural systems; protection systems and design methodology; automation; control of dynamic systems; damage control

and firefighting; control of acoustic and non-acoustic signatures; high speed platforms; sense and respond logistics; and inter- and intra-ship material movement and tracking. The division also supports outreach programs concerned with the development of future naval engineers and naval architects through the National Naval Responsibility.

## **2.2 Scope**

The contractor shall provide technical, engineering, administrative, and program management support to the Ship Systems and Engineering Division (Code 331) Division Head, Program Officers, and other Division personnel for programs under the cognizance of Code 331. Details of the scope of work are described in Section 2.3 (Technical Task/Requirements). Specific requirements are described in Section 3 (Personnel Requirements).

## **2.3 Technical Tasks/Requirements**

- Ship Systems and Engineering Division Technical and Management Support

2.3.1 The contractor shall provide personnel with extensive experience in the design and control of electrical equipment and machinery, including conventional AC and/or DC, permanent magnet and superconducting motors, high power density electrical actuators, recoverable shipboard electrical power systems, pulsed high power systems for sensors, weapons and defensive systems, fuel cells, recoverable automated shipboard auxiliary systems, acoustic and non-acoustic ship/platform signatures, hydrodynamics, logistics, damage control and recoverability, shipboard energy storage systems, alternative fuels systems for marine applications, distributed sensor systems, structural dynamics, inter- and intra-ship material movement and tracking, high speed platforms, hydroacoustics, systems engineering, thermo-mechanics, and other technical areas commensurate with the Division's core business areas on an as needed basis.

2.3.2 The contractor shall assess and advise the Division on recent advances and development in S&T and Research Development, Test and Evaluation (RDT&E) initiatives (in the technical areas cited above) that may be of significance to the U.S. Navy and Marine Corps. Assessments shall include innovative S&T initiatives with the potential for improvements, if not breakthroughs, in the Navy's war fighting capabilities and in promoting better affordability of technology to the Navy.

2.3.3 The contractor shall evaluate technical progress and plans in S&T programs, make recommendations for coordinating, augmenting, changing emphasis of, or broadening scope of S&T programs sponsored by the Division as a result of visits, attendance at meetings, and general surveys of the technologies that apply to the Division's specific Thrust Areas.

2.3.4 The contractor shall analyze, summarize, and integrate information received and prepare technical assessment reports and briefings. The contractor shall provide the above services to the Division Director ONR 331, Thrust Area Managers, Program Officers and staff.

2.3.5. The contractor shall aid in the development of program planning documentation, e.g., Program Strategy and Implementation (PSI), Thrust Implementation Plans (TIP) and the associated Program Initiative Implementation Plans (PIIPs), along with Defense Technical Area Plans (DTAP).

2.3.6. The contractor shall assist in preparing briefing material, including the Technical Area Requirement Assessment (TARA) and Defense Science and Technology Advisory Group (DSTAG) presentations.

2.3.7 Specifically the contractor shall provide the appropriate mix of Program Managers, Research Scientists, Technical Support, Specialists, and Program Analysts to:

- a. Formulate alternative investment strategies with vertically integrated basic research, exploratory and advanced research and development program elements.
  - b. Critique S&T program documentation in general and program transition
  - c. Analyze and assess industrial technology, concepts, programs and investments in areas specifically related to Division's thrust area objectives.
  - d. Advise in the development of alternative S&T project priorities, goals, and objectives.
  - e. Monitor S&T progress and assess program achievements relative to plans
  - f. Provide project management support to review goals, objectives, and results.
  - g. Support overall technical program management of the Division's thrusts, by evaluation of white papers.
- Program/project planning, investment reviews, technology assessments, data analysis, conference and seminar activities, and financial issues.

- h. Provide extensive technical review and support to program officers for preparing Area Requirement technical briefings specifically in the area of ground and sea vehicles.
  - i. Facilitate dialogue with managers executing ONR directed S&T programs at Warfare Centers, System Commands and Program Executive Officer organizations.
  - j. Provide technical and administration support services and coordination for Integrated Product Team (IPT) meetings, conferences, and workshops.
  - k. Plan, host, and conduct technical and programmatic meetings at various levels. Prepare and distribute meeting reports. Provide Facilitator services to resolve differences between various technical groups within programs in order to obtain consensus on issues and to develop cohesive program teams.
  - l. Coordinate with other DoD organizations and other Government agencies (to include but not limited to DUSD (S&T), Air Force, Army, DARPA, NASA, NSF, DOE) to assist in the development, planning and execution of S&T programs.
  - m. Maintain and develop program management tools for correspondence, action item tracking systems, program milestone charts, and program history files. These include ONR internal network based systems and web based systems for use by program participants that may or may not be collocated within ONR.
  - n. Prepare notes, assessments, testimonies, speeches, and other materials on various technical topics, as requested.
- 2.3.8. The contractor shall provide any necessary program analyst support to accomplish and facilitate the business operation of the Division. This support includes, but is not limited to, on-site or off-site graphics, reproduction, and appropriate conference and business facilities within close proximity to ONR, and other allowable materials and services.
- 2.3.9 Division Strategic Position support assistance.
- 2.3.9.1 As required the contractor shall provide support to the Division Director to assist in studies and evaluations of the Division's strategic positioning with respect to its investment portfolio mix and customer alignment, and sensitivity analyses of the portfolio.
- 2.3.9.2 As required the contractor shall selectively provide support to the Division Director to assist in studies and evaluations to assess technology affordability and develop strategies for technologies for promoting the Division's investment portfolio mix to better drive the Navy's affordability component within the shipbuilding new construction and the maintainability components under the OM&N part of the fleet budget.

2.3.10. Technical Support to Division Program Officers and Division Program Managers shall be provided in the following areas:

- Advanced Naval Power Support including areas covered by Advanced Electrical Power Systems, Advanced Electrical Machinery, Fuel Cells, Advanced Electrical Components and High Efficiency Thermoelectric.
- Platform Survivability including areas covered by Signature and Survivable Hull Structures, Computational Mechanics and Computational Signatures, Distributed Intelligent Automated Systems, Wakes, Turbulence and Fluid Mechanics.
- Advanced Platform Concepts including areas covered by Hydrodynamics, Structures, Reliability, Design and Damaged Ship Performance, Advanced Hull Designs and Prototype Craft and Unmanned Sea Surface Vehicles.
- Sea Basing Systems and Sea Basing Components Technology
- National Naval Responsibility Program

2.10.1 Specific Tasks to support Program Officers for technology areas identified above:

- Assist ONR personnel in overall technical program management support on matters and issues consistent with ONR sponsored development projects, which includes, but is not limited to, the following: assisting in the program project planning, program staff coordination, program/project/financial reviews, technology assessments, data analyses, conference and seminar activities, and program-specific financial issues. Provides assistance and support with preparing and drafting analyses, presentations, testimonies, speeches, and reports relative to the project.
- Provide assistance in developing management tools that help define, observe, and assess actions and activities that move ONR toward strategic goals affordably and speedily. Help develop technology transition transfer plans that incorporate the latest advances in science and technology programs with on-going planned technology and acquisition programs
- Organize workshops, symposia, and program reviews, including site preparation and technical agenda development. These meetings may be held in government facilities, hotels with conference facilities, convention centers, or in the contractor's facilities. Obtain information and prepare briefings for the Program Officer. Collect, review, and organize PI task statements, monitor financial expenditures, and facilitate special program awards such as STTR, SBIR, and Naval International Cooperative Opportunities In Science & Technology Program (NICOP).
- Prepare reports on project interrelationships, including preparation of Microsoft Project and or PowerPoint presentations. Research and monitor congressional interest items, process proposals, and prepare travel plans.
- Create Web pages in support of research program and technical meetings. Identify and utilize latest IT resources and capabilities (CD ROM reporting, interactive WEB sites, etc) to facilitate information retrieval and dissemination.
- Assist ONR personnel in overall technical program management support on

matters and issues consistent with ONR sponsored development projects, which includes, but is not limited to, the following: assisting in the program project planning, program staff coordination, program/project/financial reviews, technology assessments, data analyses, conference and seminar activities, and program-specific financial issues. Includes assistance and support with preparing and drafting analyses, presentations, testimonies, speeches, and reports relative to project

- Conduct engineering evaluations of selected systems, components, devices developed under projects and programs in the technology areas previously designated. Develop executable program plans for understanding, predicting, and controlling their projected behavior for improved performance and reduced cost.
- Conduct engineering and/or scientific evaluations of the power electronics field to identify unique capabilities in industrial organizations, academia, trade organizations and other appropriate organizations and recommend productive and effective teaming relationships.
- Conduct engineering evaluations of large scale conventional and superconductor Electrical Naval Power Systems and Naval Electrical Machinery and Advanced Electrical Components. Develop a database of the various systems, components and devices that characterize their projected behavior in the All Electric Warship, include in the database corresponding models for the devices/components/systems and whether there are also models for their signature effects, provide modeling fidelity information, identify where gaps exist in shipboard architecture, shipboard system control, signature prediction, or model validation. Develop a roadmap indicating for selected components where they may transition to naval platforms currently under development or planned acquisition.
- Develop integrated technology roadmaps incorporating science and technology programs with on-going and planned acquisition programs. Provide services to identify, recommend, coordinate and prepare applicable assessments, plans, strategies and opportunities for the transition of technology programs for further development and deployment in the fleet. This includes, but is not limited to, providing coordination and technical support to the Future Naval Capabilities (FNC) transitional areas of interest.
- Review, identify and assess emerging requirements, technologies, capabilities, concepts, tactics of interest, and possible teaming relationships in areas related to ONR's objectives for selected technology programs.
- Perform engineering evaluations to assess and advise on recent advances and developments in S&T and RDT&E initiatives relating Computational Mechanics and Computational Signatures that may be of significance to the ONR Program Officer's lead in this Code 331 business area and assist in that PO's strategic program planning processes.
- Perform engineering evaluations to assess and advise on recent advances and development in S&T and RDT&E initiatives relating to ship signatures and hull structures that may be of significance to the Reduced Signatures and Survivable Structures Thrust's objectives. The contractor as required shall assist in the development of studies and evaluations to address future signature

investment areas, assist in planning strategy to support investment decisions within the climate of shipbuilding budgets, GWOT considerations, blue/brown water OPS, littoral OPS, anticipated geopolitical threat characterization over respective time horizon, anticipated missions, anticipated ability to rely on performance of overt and covert countermeasures to threats and anticipated performance of same.

- Perform engineering evaluations to assess and advise on recent advances and development in S&T and RDT&E initiatives relating USSV's, their employment in littoral operations and integration into supporting forces that may be of significance to the USSV Program Officer's strategic planning program planning processes.
- Assist in the development of materials for conduct of the National Naval Responsibility Program, the preparation of briefings, reports, other supporting material documents as necessary, background research to support meetings and planning activities. Assist in the coordination of the NNR with the other activities within the Division and the rest of the Department and the ONR. Maintain a record of all NNR activity for each fiscal year that includes number of educational institutions in the program, students that have been directly connected with the program, event history, significant contacts list, up to date Power Point presentation long and short versions covering the program, and material file and content page for submission to the ONR webmaster.
- Perform engineering evaluations on technologies for defeat of blast and fragmentation for ground and sea vehicles, evaluate modeling and simulation methods, materials, structures and literature. Advise Program Manager on emerging technologies from all sources that can provide potential for light weight but high performance solutions. Develop technology road maps depicting technologies, level of maturity, RDT&E necessary to characterize performance or define properties for intended use on specific platforms.
- Develop by compiling from multiple sources and maintain with yearly updating an integrated database with full traceability to source of Fleet and Marine Corps Capability Requirements with data presentations in formats having appropriate sorts and arrangements to map to the business areas of the Division that can assist the Division and Program Officers in developing investment strategy, Identify whether there are GAP areas that merit consideration for potential exploration of future investment. Determine extent/characterize level of "volatility" in the capability requirement in terms of its anticipated time longevity.
- Perform an annual search along a primary core business area as specified by the Division Director and identify on a global basis any potential Disruptive Technologies that can impact Division S&T products in development.

#### 2.3.11 Ship Systems and Engineering Division Financial Support

Specific Financial Support Tasks - The contractor shall provide a senior program analyst program/financial analysts to support the following tasks:

- a. Provide financial reviews of the execution of programs with widely varying needs, goals, objectives, work practices and timetables.

- b. Monitor availability and use of funds. Review financial documents and plans for impact on program objectives and requirements.
- c. Prepare internal financial notices, instructions, guidelines and reports.
- d. Conduct analysis and provide reports that identify, quantify and evaluate program specific financial execution of accounts and accomplishment of program goals and milestones.
- e. Coordinate preparation and review of actual and projected funding estimates, justifications and strategies. Provide services to assist ONR 331 in planning, executing and evaluating investment strategies and organizational resource allocations. This includes, but is not limited to, conducting engineering and programmatic assessments of ONR 331's investment portfolio and operations, providing evaluations and assessments of program balance and return on investments, and reviewing and assessing operational procedures.
- f. Identify program specific financial issues related to deficiencies, excesses, trends and imbalances to assure funds availability.
- g. Work with program managers and program officers to expedite financial execution and ensure programmatic benchmarks are met.
- h. Draft responses to internal and external communiqués on programmatic and program specific financial issues.
- i. Develop management tools that help define, observe, and assess actions that move ONR toward strategic goals affordably and speedily.
- J. Maintain and upgrade ONR 331 web based database. (This includes the development and/or adaptation of decision tools, including commercial information technologies.)
- k. Provide database design and maintenance, software development, graphics and reproduction, appropriate nearby conference and business facilities, and other allowable materials and services necessary to support the tasks in this statement of work.
- l. Assist program officers in program planning and program specific financial issues.
- m. Assist program officers in planning, organizing and assessing results of annual technical program reviews and DDR&E TARA reviews.
- n. Assist the Division Director in the preparation of Defense Technology Area Plans (DTAP) and drafting Defense Technology Objectives (DTO's) and in the preparation of Technology Area Requirements and Assessment planning, budgeting and financial documentation.
- o. Assist the Division Director and Program Element Coordinator in the preparation of Congressional R2 Exhibits for the Department, and in addressing associated related exchanges between ONR 08 and R2 Activity Coordinators to adjust narratives, and financial data during the multiple calls imposed during the course of the budget year.

#### 2.3.12 Special Studies and Advisory Groups

- Special Studies and Special Advisory Groups may be required to support the



tasks specified herein. Support for special studies and special advisory groups may be required to provide additional management and technical assistance to support the ONR Code 331 roles and responsibilities. As requirements become better defined, the contractor may be tasked to call upon special advisory groups to support ONR Code 331 programs. The special advisory groups should be structured to provide individuals with unique skills, knowledge and abilities that, in general, can advance the mission assigned to ONR Code 331, and specifically, bring the special skills and experience required for the task at hand.

## **2.4 Reports Data and Other Deliverables**

- Monthly Progress and Management Report The contractor shall provide monthly progress and management reports. The report is due by the 28th of every month and shall include the hours and costs charged against the contractor per individual on the contract including a list of the level of effort performed, expenditures, cumulative expenditures along with a discussion of specific work items, tasks assigned/performed, accomplishments, and list significant memoranda, white papers, briefings, technical reports or other significant documentation either produced or in progress, and status of tasks in progress or accomplished during the reporting period as well as a forecast of work products for the up coming month. Contractor format is acceptable.
- Presentation material. The contractor shall provide presentation materials as required by the ONR Program Office. Contractor format is acceptable
- Travel reports. The contractor shall provide travel reports no later than 30 days after the conclusion of the travel requirement specified by the ONR Program Office. The report shall contain dates, locations of travel, purpose, total cost with unusual cost items (including registration fees) specifically set forth, tasks performed, and accomplishments. If publications or proceedings documentation were distributed a copy may be included with the report. Contractor format is acceptable
- Other reports, memoranda, and papers. The contractor shall provide other reports, memoranda, and papers as required by the ONR Program Office. Contractor format is acceptable
- Final report. The contractor shall provide a final report at the completion of the base period, and if applicable, each option period. The report shall include a summary of the major tasks and accomplishments and a roll up and compilation of the information provided in the monthly reports. The ONR Program Office will provide input and contractor format is acceptable.

## **3.0 Personnel Requirements**

### **3.1 Personnel Qualifications**

The Contractor shall provide qualified personnel to manage and execute all aspects of the statement of work. The following skill sets are anticipated to support the tasks:

### 3.1.1 General Requirements

3.1.2 Supporting the wide range of engineering and programmatic activities sponsored by ONR Code 331 requires contractors with a diverse set of management abilities, technical capabilities and experience. This Statement of Requirements seeks contractors that have demonstrated experience in the following areas:

- Demonstrated extensive technical experience in the various types of shipboard electrical machinery such as large scale high temperature superconducting motors, DC homopolar motors, quiet electric drive systems, power dense liner actuators, high temperature superconducting generators, high temperature super conducting transformers, high temperature superconductive distribution systems, power dense electrical machinery and electrical systems as applied in maritime environments. Additionally they must be knowledgeable regarding ancillary equipment, shipboard electrical systems load management, and key technologies associated with the machinery, and the management of such research and development programs.
- Knowledge of intelligent, reconfigurable, solid-state based, zonal-electrical power systems, thermal management technologies, dynamic reconfiguration, pulsed power technologies, advanced power electronics, alternative cooling systems, thermal performance and reliability, motor controller weight and volume reductions, and battery technologies.
- Specific experience in high energy storage, low leakage dielectrics, capacitors, superconducting magnetic energy storage systems (SMES), Silicon Carbide (SiC) switches/amplifiers/power conditioners, current amplifiers, battery technology including chemistries for marine and land application use, charging systems, solar systems, and other associated technical areas as required and who are familiar with the overall S&T and RDT&E processes.
- Knowledge in above water and underwater acoustic and non-acoustic signatures; source identification, source modeling and simulation, source mitigation and compensation technology systems, sensors and sensor systems for signature data acquisition, data fusion and rendition methods such as holography presentations, computational mechanics; structural acoustics; and hull structures.
- Knowledge of all phases of naval logistics associated with the Sea Basing concepts ranging from identification and tracking of material, material handling ashore and at sea, material transfer from sea to shore, design and development of ships and craft to perform the material movement in concert with other supporting equipment such as cranes, lifts, high speed horizontal and vertical wireless elevators, human amplification

technologies, and omni-directional movers and in varied Sea States. Experience in the technical areas of UNREP/VERTREP, performance based logistics, lighterage systems, material movement, location and tracking systems.

- Experience in the design and development of unique and novel high performance craft under ambitious and aggressive schedules that incorporate components of state of the art naval engineering to demonstrate technology leap aheads.
- Specific experience in Explosion Resistant Coatings, steel and composite joints used in shipbuilding applications, composite and composite-metal hull performance characterization, distributed intelligence for automated survivability, modeling and simulation of designs and virtual T&E of shipboard systems, HM&E system reconfiguration after damage events, agent based control systems, and algorithms
- Knowledge of USSV design, onboard systems, payloads, command/control systems, test and evaluation of components and systems, CONOPS development, trades analyses, and mission effectiveness studies.
- Knowledge of directly converting thermal energy to electricity, materials and processes for direct energy conversion, modeling and simulation of direct energy conversion systems, Electrogasdynamics Conversion (EGD), Magneto hydrodynamic Conversion (MGD), Thermionic Generation, thermoelectric materials, and conversion efficiency models.
- Knowledge of hydrodynamics computational tools development for submarine maneuvers, advanced control surface technologies, circulation control validation, ducted propulsor design/analysis, DPJP system concepts, propulsion jet cavitation analyses, Eddy simulations, distributed propulsors, tunnel wall incident phase flow water jet systems, turbulent flow modeling, and modeling and simulation of propeller LE and TE effects.
- Knowledge of computational fluid dynamics, control surface design and engineering, flow noise, cavitation analyses, ducted propulsor systems, Reynolds Average Navier-Stokes (RANS) Code models, and boundary layer models.
- Knowledge of Office of Naval Research policies and procedures.
- Knowledge of Future Naval Capabilities and their relationship to Office of Naval Research technology efforts.
- Capable of developing planning methodologies to analyze research programs.
- Experience with the preparation of studies and analyses of current and future naval equipment and force structure requirements.
- Experience providing expert opinions and analyses and presenting results either in the form of technical papers or formal briefings.
- Able to evaluate, develop, and suggest improvements to analytical models, procedures, and techniques.
- Capable of developing and maintaining key documents and

master plans that incorporate all relevant studies and analyses.

- All personnel must be thoroughly familiar and proficient in the use of commercial software packages such as Microsoft Word, Project, Excel and PowerPoint. Program and Financial Analysts on a case basis need to be thoroughly familiar with the ONR NAVRIS financial management system.

### 3.1.2 Personnel Requirements

- Program Manager:

A Bachelors degree from an accredited college or university and three years of management experience in a related S&T discipline. Ability to develop and execute complex technical tasks, to apply analytical problem solving methodologies, to provide technical direction to support staff to interface with Government and prime contractor personnel, and to effectively allocate resources. Experience in translating operational requirements into system technology solutions and assessment of current investment for applicability. Demonstrated experience in the integration, demonstration and transition of S&T Programs. Experience in coordination across Navy and Marine Corps warfare areas.

- Senior Research Scientist:

A Ph.D. degree in engineering or science from an accredited university with at least five years experience in S&T discipline or a Graduate degree in a technical field from an accredited university with significant R&D experience and ten years recent and specialized experience in a related S&T discipline. Documented experience in and working knowledge of the government defense programs. Documented experience in the evaluation of proposed solutions in specified or related technical area. Demonstrated the ability to coordinate teams of experts in the accomplishment of complex tasks.

- Research Scientist II:

A Graduate degree in engineering or science from an accredited university with three years recent and specialized experience in S&T discipline or Bachelors degree in a technical field from an accredited university with significant R&D experience with seven years recent and specialized experience in a related S&T discipline.

- Technical Support Specialist II:

A Bachelors degree in a technical field from an accredited university with five years experience or a Graduate degree in a technical field from an accredited university with three years experience in the Navy S&T programs or financial management support.

- Technical Support Specialist I:

A Bachelors degree from an accredited university with two years experience in the Navy S&T programs or financial management support involving all funding categories and sources, budget data development, and periodic status development.

- Program Analyst:

A Bachelors degree from an accredited college or university, or 5 years applicable experience at the senior program analyst level. To satisfactorily perform these tasks a Senior Program Analyst knowledgeable and familiar with the ONR NAVRIS system must possess the expertise to maintain and upgrade the ONR 331 information systems including its financial information and tracking system (FITS) and the Program Strategy and Implementation (PSI) database. These information systems require expertise in Microsoft Excel and Access and their automatic integration with the ONR NAVRIS system.

- Senior Financial Analyst:

A Bachelors degree from an accredited college or university or 5 years applicable experience.

The program analysts must be familiar with ONR financial procedures and operating the Division's information systems to provide timely information to the Division Director, Program Managers, and Program Officers on request. They support data collection/organization, and the preparation of documents, reports, financial spreadsheets and presentation materials. In particular, these analysts must be able to operate the Ship Systems and Engineering Division's planning systems.

Personnel must be able to provide rapid assistance working in a time sensitive environment. All personnel should have a SECRET Clearance. If personnel do not have a secret clearance, they must be eligible for one.

### **3.2 Level of Effort**

3.2.1 The level of effort has been estimated for the proposed contract. Both at 25,760 man-hours in the base period and 25,760 man-hours in four option years for a total of 128,800 man-hours.

3.2.2 Base Period: The base period of performance will be from time of award through 12-months. The level of effort anticipated for this period is approximately 14 man-years at an average rate of approximately 2147 hours per month. A summary of the labor categories and the total anticipated annual hours for this effort is estimated below.

<b>Labor Category</b>	<b>Level of Effort (Base Period)</b>
Program Manager	1380
Senior Research Scientist	7360
Research Scientist II	6900

Technical Support Specialist II	2760
Technical Support Specialist I	1840
Senior Financial Analyst	2760
Program Analyst	2760
Total Per Year	25,760

NOTE: 1,840 hours is equivalent to one (1) man-year

3.2.3 The above labor categories and hours are provided as the Government's best estimate of the work to be performed. The offeror may propose the same level of effort (hours and labor categories) or a different level of effort based on its own labor classification system and unique approach to satisfy the Government's requirement.

3.2.4 While the Government will consider an alternate level of effort, it is the Government's preference to maximize the estimated labor hours devoted to the direct performance of the technical tasks. To the extent that the level of effort proposed is different than the Government's estimate, the offeror's technical proposal should clearly specify the hours and labor categories proposed for each task in the statement of work.

3.2.5 Option Period 1: The Option 1 period of performance will be from time of award through 12-months. The level of effort anticipated for this period is approximately 14 man-years at an average rate of approximately 2147 hours per month. A summary of the labor categories and the total anticipated annual hours for this effort is estimated below.

<b>Labor Category</b>	<b>Level of Effort (Option Year 1)</b>
Program Manager	1380
Senior Research Scientist	7360
Research Scientist II	6900
Technical Support Specialist II	2760
Technical Support Specialist I	1840
Senior Financial Analyst	2760
Program Analyst	2760
Total Per Year	25,760

NOTE: 1,840 hours is equivalent to one (1) man-year

- 3.2.6 Option Period 2: The Option 2 period of performance will be from time of award through 12-months. The level of effort anticipated for this period is approximately 14 man-years at an average rate of approximately 2147 hours per month. A summary of the labor categories and the total anticipated annual hours for this effort is estimated below.

<b>Labor Category</b>	<b>Level of Effort (Option Year 2)</b>
Program Manager	1380
Senior Research Scientist	7360
Research Scientist II	6900
Technical Support Specialist II	2760
Technical Support Specialist I	1840
Senior Financial Analyst	2760
Program Analyst	2760
Total Per Year	25,760

NOTE: 1,840 hours is equivalent to one (1) man-year

- 3.2.7 Option Period 3: The Option 3 period of performance will be from time of award through 12-months. The level of effort anticipated for this period is approximately 14 man-years at an average rate of approximately 2147 hours per month. A summary of the labor categories and the total anticipated annual hours for this effort is estimated below.

<b>Labor Category</b>	<b>Level of Effort (Option Year 3)</b>
Program Manager	1380
Senior Research Scientist	7360
Research Scientist II	6900
Technical Support Specialist II	2760
Technical Support Specialist I	1840
Senior Financial Analyst	2760
Program Analyst	2760

Total Per Year	25,760
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NOTE: 1,840 hours is equivalent to one (1) man-year

3.2.5 Option Period 4: The Option 4 period of performance will be from time of award through 12-months. The level of effort anticipated for this period is approximately 14 man-years at an average rate of approximately 2147 hours per month. A summary of the labor categories and the total anticipated annual hours for this effort is estimated below.

Labor Category	Level of Effort (Option Year 4)
Program Manager	1380
Senior Research Scientist	7360
Research Scientist II	6900
Technical Support Specialist II	2760
Technical Support Specialist I	1840
Senior Financial Analyst	2760
Program Analyst	2760
Total Per Year	25,760

NOTE: 1,840 hours is equivalent to one (1) man-year

## **4.0 Order Details**

**4.1 Contract Type:** The Navy anticipates awarding a cost plus fixed fee level of effort task order.

**4.2 Period of Performance:** Base period of 12 months from time of award with 4 one-year options.

### **4.3 Other Direct Costs (ODCs)**

ODCs (including supplies, travel, etc.) will be reimbursed at cost plus G&A without profit or fee. Purchases of items (other than consumable materials or supplies) exceeding \$2,500 and all travel must be approved in advance by the Contracting Officer's Representative (COR). The total ODC amount is not to exceed (NTE) including G&A \$80,000 per year. At this time, the specific items cannot be identified; however, the ODC total cannot exceed the NTE amount stated in this section.



4.3.1 Travel and Per Diem - Travel may or may not be required to support this Statement of Work. In accordance with the contract requirements, direct costs associated with the Contractor's travel, including per diem, shall not exceed the applicable rates found in the Federal Travel Regulation (FTR) and/or the Joint Travel Regulations (JTR). All travel arrangements under the Contractor's responsibility include: clearance requests, hotel accommodations, travel orders, and visa/passport requirements, unless otherwise stated by the Government sponsor.

4.3.2 Other Direct Costs (Other than Travel and Per Diem) – ODCs may be required to full support this task requirement. At this time, the specific items cannot be identified. The ODC and Travel cost total cannot exceed the NTE amount stated in section 4.3.

**4.4 Place of Performance:** Work will normally be performed at the Contractor's facilities.

**4.5 Government Furnished Resources (GFR):** The Government will provide information, material and forms unique to the Government for supporting the task. The Government furnished resources necessary to perform the statement of work should be identified and requested through the designated Contracting Officer's Representative (COR).

**4.5.1 Facilities, Supplies and Services:** The facilities required to perform the tasks outlined in the Statement of Work will be at the Contractor's place of business. Occasionally there may be a need for direct support to be provided at ONR Headquarters to Division staff on a case basis. For those cases basic facilities such as work space and its associated operating requirements (i.e., phones, desks, and utilities) will be provided while working in Government facilities. The availability of any required computer resources while working in Government facilities should be verified in advance with the designated Contracting Officer's Representative (COR).

**4.5.2 Information:** All Government unique information related to this requirement necessary for Contractor performance will be made available to the Contractor. The Contracting Officer's Representative (COR) will be the point of contact for identification of any required information to be supplied by the Government.

**4.5.3 Documentation:** All existing documentation relevant to this task's accomplishment will be made available to the Contractor at the beginning of the task. The Contractor will be required to prepare documentation in accordance with defined guidelines provided by the Government.

**4.5.4 Equipment:** With the exception to the basic facility items noted Subsection 4.5.1, and in accordance with the general guidance in FAR Part 45.102, Contractors are required to furnish all property necessary to perform on Government contracts or orders. PC's should not be proposed as a direct charge under this solicitation.

**4.6 Subcontracts/Consultants:** Contractor may request or propose, on a case-by-case basis, subcontract/consultant support for specific technical tasks.

**4.7 Security Requirements:**

a) Clearance Requirements. During the performance of the effort, the Contractor may be required to have access to, and may be required to receive, generate, and store information classified to the level of SECRET. For personnel, a minimum of a SECRET clearance is required. A DD Form 254 will be required prior to access or production of any classified information. Additionally, Contractor is required to safeguard the information labeled as proprietary.

b) Privacy Act. All Contractor personnel assigned to this task will have access to information that may be subject to the Privacy Act of 1974. The Contractor is required to ensure the proper safeguarding of such information to prevent unauthorized release.

c) Nondisclosure Agreement. In the course of its work, each employee of the selected Contractor will be required to execute a Nondisclosure Agreement (NDA) as outlined in Section 5.2.1 of this solicitation.

**4.8 Organizational Conflict of Interest**

**4.8.1 Safeguarding Information**

The parties acknowledge that, during performance of the contract resulting from this Order solicitation, the Contractor may require access to certain proprietary and confidential information (whether in its original or derived form) submitted to or produced by the Government. Such information includes, but is not limited to, business practices, proposals, designs, mission or operation concepts, sketches, management policies, cost and operating expense, technical data and trade secrets, proposed Navy budgetary information, and acquisition planning or acquisition actions, obtained either directly or indirectly as a result of the effort performed on behalf of ONR. The Contractor shall take appropriate steps not only to safeguard such information, but also to prevent disclosure of such

information to any party other than the Government. The Contractor agrees to indoctrinate company personnel who will have access to or custody of the information concerning the nature of the confidential terms under which the Government received such information and shall stress that the information shall not be disclosed to any other party or to Contractor personnel who do not need to know the contents thereof for the performance of the contract. Contractor personnel shall also be informed that they shall not engage in any other action, venture, or employment wherein this information will be used for any purpose by any other party.

#### **4.8.2 Organizational Restrictions**

Support contractor's knowledge of competition sensitive information, described in paragraph above, may unfairly affect its competitive position in future ONR research solicitations. The Contractor understands that, during performance of the contract resulting from this Order solicitation and for a period of up to two years after the completion of its performance of the contract, the Contractor, any affiliate of the Contractor, any joint venture involving the Contractor, any entity into or with which the Contractor may merge or affiliate, or any other successor or assign of the Contractor may not be eligible to participate as a prime Contractor, subcontractor, consultant, joint venture, partner, or other agreements directly impacted by the basic and applied research, and advanced technology development of programs in the following areas: Advanced Naval Power Systems, Advanced Platform Concepts, Platform Survivability, and Sea Basing Systems research programs.

### **5.0 Proposal Requirements**

**5.1 Proposal Format:** The Offeror's proposal must be divided into two sections: (1) Technical Proposal, and (2) Cost Proposal. Information for the technical portion shall be a separate and segregable document from the cost proposal. No cost information should be included in the technical section. The length of the technical proposal shall not exceed ten (10) pages, exclusive of resumes. There are no page limits on the number of resumes or the pages of the cost proposal. The proposal should be written and organized to be compatible with the Statement of Work, company's organization and accounting structure, and proposed cost.

(a) Technical Proposal: The technical proposal should include the following: The Offeror's understanding of and approach to the requirement, resumes of proposed personnel, and the amount of proposed hours for personnel. The Offeror should describe specifically how the work activities required to complete the tasks in the statement of work will be done. The Offeror should

explain how technical objectives, tasks and deadlines will be determined; how staff responsibilities will be assigned; whether and to what degree consultants and/or subcontractors will be utilized; how the quality and timeliness of work performance will be supervised and controlled; how the Offeror will coordinate with the program office; how a surge capacity will be maintained to meet unanticipated requirements; and how administrative tasks such as travel, security and resource requests will be handled.

The Offeror should include information relative to previous efforts for the same or similar services provided in the past to include contract numbers and Government points of contact where applicable.

The Offeror should explain what corporate facilities are available and would be used in support of the work including computer resources, publication/media materials and equipment where appropriate. The proposal should acknowledge that the Contractor will provide the appropriate IT/telecommunications equipment for the proposed personnel for this task order.

(b) **Cost Proposal:** The Offeror should submit a cost proposal that itemizes the following proposed costs (as applicable): direct labor (including each labor category with associated proposed hours and hourly rate), fringe benefits, labor overhead, consultants, subcontracts, subcontractor/consultant handling charges, G&A, cost of money, fixed fee and any other relevant cost categories. The Offeror should also include the estimated Travel and ODC amounts set forth in the "Other Direct Costs" section of the solicitation as part of its proposed costs. The base calculation and rates must be provided for all indirect cost items. Subcontract cost information containing the same type of details described above for the prime must be provided either with the prime's proposal or in accordance with section 5.3 of this solicitation before the solicitation due date and time.

If available and applicable, the Contractor should also provide its Defense Contract Audit Agency (DCAA) point of contact, including the Branch Office name, auditor name, phone number and e-mail address.

**5.2 Other Required Documents:** Offerors should be aware that, upon receiving an award, the following additional documentation will be required:

**5.2.1 Non-Disclosure Agreement:** Each employee of the successful Offeror will be required to sign a Non-Disclosure Agreement (NDA) prior to commencing work under this Order. The supervisor/manager of the proposed personnel will also be required to sign the NDA on behalf of the

Contractor. Attachment A is the NDA that shall be used at the commencement of this order.

**5.3 Proposal Submission:** The due date for receipt of proposals for this solicitation is no later than 2:00 p.m. (Local Time) on 06 November 2006. All proposals must be uploaded electronically via the "[Upload Proposals](#)" hyperlink, which is under the hyperlink for this solicitation on ONR's MATOC website. (Note: this site restricts the formats of uploaded documents to those in MS Word, MS Excel, or PDF.)

## **6.0 Evaluation Information**

**6.1 Evaluation Criteria:** A Task Order will be awarded to the responsible offeror whose offer represents the best value to the Government. In order to determine which offeror represents the best overall value, offers for individual task orders will be evaluated on the following Technical and Price/Cost Factors:

### Technical Factors

- (1) Proposed personnel
  - a. Maritime Advanced Naval Power/High Power Electrical/Hull Mechanical & Electrical Systems Experience
  - b. S&T and RDT&E Processes Experience/Knowledge
- (2) Management Plan and Technical Approach
- (3) Past performance on earlier tasks under this and similar contracts
- (4) Corporate Facilities

### Price/Cost Factors

- (5) Cost

The Government will make a determination of the overall value of each proposal in terms of its potential to best satisfy the needs of the Government, considering both Technical and Cost Factors.

The Offeror's technical capability (as measured by the Technical Factors) will be more important than the Cost Factor. In regards to the stated Technical Factors, Technical Factor 1 is of the greatest weight; Technical Factors 2 through 3 are equally weighted. Technical Factor 4 is of less value than all other Technical Factors.

In evaluating past performance on individual orders, the procedural requirements in FAR 42.15 are not mandatory. Past performance will be based on the Government's subjective evaluation of the Contractor's performance with previous orders, if any, under this contract and similar contracts.

**6.2. Award:** The Government will award a task order to the responsible Offeror whose offer conforming to the solicitation will be most advantageous to the Government, cost and other factors considered. The anticipated award and start date of this Order is on or about 20 November 2006.

**7.0 Submission of Questions:** Any questions regarding this solicitation must be provided in writing to the Point of Contact listed below. Acceptable forms of written question submission include fax and e-mail. Questions submitted less than 72 hours prior to the closing date for proposals may not be answered and the due date for submission of proposals may not be extended.

**8.0 Solicitation Amendments:** Any amendments to this solicitation will be posted along with the solicitation on the ONR website. It is the Offeror's responsibility to regularly check for any postings of solicitations, amendments, and questions and answers under this or any other MATOC Solicitation.

**9.0 Point of Contact:** The Point of Contact for this solicitation is Matt Ferebee, 0254, phone- (703) 696-1474, fax- (703) 696-3365, or email- [ferebem@onr.navy.mil](mailto:ferebem@onr.navy.mil).

**10.0 Attached is a Draft Copy of the Description of Supplies/Services**

## **Non-Disclosure Agreement Regarding Contractor Support for the Office of Naval Research**

The undersigned individual, \_\_\_\_\_, agrees, both in his personal capacity and as an employee of \_\_\_\_\_ as follows:

### **BACKGROUND**

1. The mission of the Office of Naval Research is to plan, foster, and encourage scientific research and technology development in recognition of their paramount importance in the maintenance of future naval power and the preservation of national security. ONR provides for the continuing technological superiority of U.S. naval forces, by providing the Department of the Navy (DoN) with mission-relevant, affordable new capabilities that create and exploit scientific breakthroughs, respond to fleet requirements, and support strategic U.S. industries. ONR requires contractor technical services and research support in order to meet these requirements. The services/support that may be provided to ONR by contractor personnel include but are not limited to the following:
  - i. Assist ONR personnel in overall technical program management support on matters and issues consistent with ONR sponsored development projects, including assisting in the evaluation of white papers, proposals, program/project planning, investment reviews, technology assessments, data analyses, conference and seminar activities, and financial issues.
  - ii. Provide support in the financial execution of ONR programs. Monitor availability and use of funds. Review financial documents and plans for impact on program objectives and requirements. Prepare internal financial notices, instructions, guidelines and reports. Conduct analyses and provide reports that identify, quantify and evaluate financial execution of accounts and accomplishment of program goals and milestones. Coordinate preparation and review of actual and projected funding estimates, justifications and strategies. Identify deficiencies, excesses, trends and imbalances to assure funds availability. Work with program personnel to expedite financial execution and ensure programmatic benchmarks are met.
  - iii. Draft analyses, presentations, notes, assessments, testimonies, speeches, and other materials on various technical/management topics, as requested, for use by ONR personnel with other internal ONR departments and externally with the Navy staff, Department of Defense, other federal and state agencies and the U.S. Congress.
  - iv. Provide assistance in the areas of information technology to include database design and maintenance, software development, graphics and reproduction, and other allowable materials and services.
  - v. Provide administrative and management support in the execution of ONR programs to include the preparation of official documents and files for execution by Government employees.
  - vi. Provide support on technical, programmatic and operational matters pertaining to the diverse array of technologies investigated and supported by ONR.

2. The undersigned individual is serving as contractor support for ONR. As such, he has and will continue to come into contact with proprietary technical and commercial information. He likewise will have access to sensitive internal information developed by or on behalf of the Government in connection with the accomplishment of ONR's mission.

## AGREEMENT

1. The undersigned individual agrees that he will not disclose to any individual, company, or Government Representative<sup>1</sup> any information<sup>2</sup> relating to current or proposed Navy budgetary information, acquisition planning or acquisition actions, obtained either directly or indirectly as a result of the effort performed on behalf of ONR. The undersigned individual agrees that he will promptly notify the ONR Office of Counsel of any attempt by an individual (including any contractor personnel), company or Government Representative to gain unauthorized access to such information, and of any disclosure of such information to unauthorized parties. Such notification shall include the name and organization, if available, of the individual, company or Government Representative seeking access to such information.
2. The undersigned and his employer acknowledge that the owner of any proprietary information improperly disclosed stands as an intended third-party beneficiary of this non-disclosure agreement. In the event of an unauthorized disclosure of proprietary information, the owner of the information may seek legal recovery under this non-disclosure agreement, even though the information owner is not a formal party to the agreement.

FOR THESE REASONS the undersigned individual agrees on his own behalf, and his employer likewise concurs, to protect, respect and not disclose the proprietary information and Government mission- and procurement-sensitive information that may come to their attention as part of the contract assistance provided to ONR.

Employee Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Date \_\_\_\_\_

Concurrence by the employer:

Supervisor/Manager Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Date \_\_\_\_\_

<sup>1</sup> Government Representative is defined as any Government employee, either military or civilian, not assigned to the activity or program office for which the effort is being performed.

<sup>2</sup> This information includes, but is not limited to, contractor proposals, proprietary data and commercial information, reports and other information in the Government's possession, including information contained in contracts/grants/agreements and associated records and files



<b>ITEM NO.</b>	<b>SUPPLIES/SERVICES</b>	<b>ESTIMATED COST</b>	<b>FIXED FEE</b>	<b>TOTAL ESTIMATED COST &amp; FIXED FEE</b>
0001	BASE PERIOD The Contractor shall provide support services for ONR Code 331 as specified in Attachment 1	To be filled in by contractor	To be filled in by contractor	To be filled in by contractor
0002	Other Direct Costs	\$80,000.00	\$0.00	\$80,000.00
0003	OPTION PERIOD 1 The Contractor shall provide support services for ONR Code 331 as specified in Attachment 1	To be filled in by contractor	To be filled in by contractor	To be filled in by contractor
0004	Other Direct Costs	\$80,000.00	\$0.00	\$80,000.00
0005	OPTION PERIOD 2 The Contractor shall provide support services for ONR Code 331 as specified in Attachment 1	To be filled in by contractor	To be filled in by contractor	To be filled in by contractor
0006	Other Direct Costs	\$80,000.00	\$0.00	\$80,000.00
0007	OPTION PERIOD 3 The Contractor shall provide support services for ONR Code 331 as specified in Attachment 1	To be filled in by contractor	To be filled in by contractor	To be filled in by contractor
0008	Other Direct Costs	\$80,000.00	\$0.00	\$80,000.00
0009	OPTION PERIOD 4 The Contractor shall provide support services for ONR Code 331 as specified in Attachment 1	To be filled in by contractor	To be filled in by contractor	To be filled in by contractor
0010	Other Direct Costs	\$80,000.00	\$0.00	\$80,000.00
TOTAL ESTIMATED CONTRACT CONSIDERATION:		To be filled in by contractor	To be filled in by contractor	To be filled in by contractor